

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : November - 2016

Pharmaceutical Analysis of Ayurvedic Drugs - II

Date: 05-12-2016

Monday

Time: 09:30 A.M. to 12:30 P.M.

Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Discuss detectors in gas chromatography with diagram. 10
2. Answer any one out of two questions. 10
 - A. Discuss instrumentation of layer chromatography in detail.
 - B. Explain the principle of column chromatography. Describe the various column preparation methods in detail. Write down its applications also.
3. Answer any **Four** out of five questions : 20
 - A. Types of injectors in H.P.L.C.
 - B. Explain elution techniques in column chromatography.
 - C. Applications of T.L.C. in details.
 - D. Describe chromatogram development techniques in paper chromatography.
 - E. Explain types of chambers and chamber saturation in H.P.T.L.C.
4. Answer any **Five** out of six questions : 10
 - A. Guard column.
 - B. Derivatization.
 - C. Types of paper in paper chromatography.
 - D. Enumerate different types of visualization techniques in T.L.C.
 - E. Define chromatograph.
 - F. Enumerate detectors used in H.P.L.C.

SECTION-B

5. Explain flame photometry ? Its instrumentation in detail. 10
6. Write any **one** out of two questions : 10
 - A. What is E.M.R. ? Explain instrumentation of U.V. spectroscopy in detail.
 - B. What is pH ? Enumerate different types of electrodes used in pH metry. Write down its applications.
7. Answer any **Four** out of five questions : 20
 - A. Different types of vibrations in I.R. spectroscopy.
 - B. Explain DSC in brief.
 - C. Applications of fluorimetry and phosphorimetry.
 - D. Applications of U.V. spectroscopy.
 - E. Abbe's refractometer.
8. Answer any **Five** of six questions : 10
 - A. H.C.L.
 - B. Blue Shift.
 - C. Enumerate sources of I.R. radiation.
 - D. Wavelength.
 - E. Frequency.
 - F. P.M.T.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : November - 2016

Rasashastra & Bhaishajya Kalpana – III (Ayurvedic Pharmaceutics)

Date: 03-12-2016
Saturday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. What is Sneha Murchchhana ? Write Ghrita Murchchhana. 10
2. Answer any one out of two questions. 10
 - A. Write ingredients, duration, Snehapaka Vidhi and indications of Jatyadi Ghrita.
 - B. Give detailed description of Tila Taila Murchchhana.
3. Write a short note on any **Four** of the following : 20
 - A. Saptamushti Yusha.
 - B. Difference between Vilepi and Yavagu.
 - C. Sneha Paka Kala.
 - D. Apamarga Kshara Taila.
 - E. Gulaba Arka and Gulaba Jala.
4. Answer any **Five** of the following : 10
 - A. Dose and shelf life of Arka.
 - B. Indications and dose of Pinda Taila.
 - C. Types of Takra and its uses.
 - D. Advantage of Lavana Kalpana.
 - E. Sneha Yoni.
 - F. Use of Sneha Paka.

SECTION-B

5. Write short note on Uparasa. 10
6. Answer any one out of two questions. 10
 - A. Give detailed description of Gandhaka Druti.
 - B. Write short note Upavisha.
7. Write a short note on any **Four** of the following : 20
 - A. Rasasindura.
 - B. Kasisa Bhasma.
 - C. Vatsanabha Shodhana.
 - D. Sadharana Rasa.
 - E. Role of Parada Murchchhana.
8. Answer any **Five** of the following : 10
 - A. Dose and antidote of Haritala.
 - B. Synonyms and types of Gauripashana.
 - C. Dose and indications of Rasagarbha Pottali.
 - D. Antidote and formulations of Kupilu.
 - E. Shodhana and dose of Rasanjana.
 - F. Toxicity and antidote of Gauripashana.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : November - 2016

Pharmaceutical Engineering

Date: 02-12-2016

Friday

Time: 09:30 A.M. to 12:30 P.M.

Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Explain objectives and discuss various mechanism used for achieving size separation. 10
2. Answer any one out of two questions. 10
 - A. Discuss objectives, factor affecting and explain colloid mill.
 - B. Define extraction. Explain factors affecting and application of extraction in pharmacy.
3. Write a short note on any **Four** of the following : 20
 - A. Fluid energy mill.
 - B. Sieving method.
 - C. Sigma blade mixer.
 - D. Homogenizer.
 - E. Theory of extraction.
4. Answer any **Five** of the following : 10
 - A. Preparation method of Vasaka liquid extract IP.
 - B. Define leaching.
 - C. What is size reduction ?
 - D. Standards for sieve.
 - E. What is emulsifier ?
 - F. Uses of triple roller mill.

SECTION-B

5. What is Mier's theory of super saturation ? Discuss its limitation. 10
6. Answer any one out of two questions. 10
 - A. Define evaporation. Discuss factors affecting the process of evaporation.
 - B. Define drying discuss their importance in the pharmacy field.
7. Write a short note on any **Four** of the following : 20
 - A. Discuss theory of distillation.
 - B. Vacuum dryer.
 - C. Circulating magma crystallizer.
 - D. Multiple effect evaporate.
 - E. Equilibrium distillation.
8. Answer any **Five** of the following : 10
 - A. Uses of crystallization in pharmacy field.
 - B. Principle of microwave.
 - C. Advantages of wiped film.
 - D. Principle of azotropic distillation.
 - E. Draw a neat diagram of drum dryer.
 - F. Define crystals.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : November - 2016

Pharmacognosy of Ayurvedic Drugs – II

Date: 01-12-2016
Thursday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Give detail account on pharmacognostical and phytochemical evaluation of group as per API. 10
2. Answer any one out of two questions. 10
 - A. What is cyanogenic glycoside ? Write a detail account on that and give detail description of plants belonging to that group.
 - B. Describe the importance of marine drugs.
3. Write a short note on any **Four** of the following : 20
 - A. Differentiate Brahmi and Mandukaparni.
 - B. Various types of Aloes.
 - C. Froth Index.
 - D. Differentiate Chhota and Bada Gokshura.
 - E. Explain enzymatic hydrolysis is recommended in cases of cyanogenic glycosides.
4. Answer any **Five** of the following : 10
 - A. Name cardio vascular agents from marine source.
 - B. What is bitter evaluation ?
 - C. Give biological sources, chemical constituents and uses of Chakramarda.
 - D. Give biological sources, chemical constituents and uses of Kirattikta.
 - E. Enumerate any two drugs with biological source of anthraquinones and flavonoids.
 - F. Define adulterants.

SECTION-B

5. What is lipid ? Give purification and refining process of fixed oil in detail. 10
6. Answer any one out of two questions. 10
 - A. How formation and distribution takes place of alkaloids in plants ? Discuss in detail and write a note on aconites.
 - B. Classify and describe chemical tests of tannins and give a note on at least two bark drugs containing them.
7. Write a short note on any **Four** of the following : 20
 - A. Gold beater's test. Skin test.
 - B. Explain why Gambir is pale brown, while cutch is black in colour.
 - C. Kernel oil of Nimba.
 - D. The adulterants of Madhuchchitsa and its identification tests.
 - E. Ahiphena.
8. Answer any **Five** of the following : 10
 - A. What is green pepper ?
 - B. Name at least two market patent formulations containing Aswagandha.
 - C. Give botanical name and family of adulterant of Ashoka.
 - D. What is Rasavarta ?
 - E. Give biological source, chemical constituents and uses of Jyotismati.
 - F. Give biological source, chemical constituents and uses of Arkapatri.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : November - 2016

Pharmaceutical Technology of Ayurvedic Drugs -I

Date: 29-11-2016
Tuesday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. What are granules ? Give advantages and disadvantages of granules over powder. 10
2. Answer any one out of two questions. 10
 - A. What are additives ? Give its classification with suitable examples.
 - B. What are aromatic waters ? Give its general method of preparation and its packaging.
3. Write a short note on any **Four** of the following : 20
 - A. Evaluation of ophthalmic products.
 - B. Granules.
 - C. Syrups and elixirs.
 - D. Ophthalmic dosage forms.
 - E. Problems encountered during preparation of powders.
4. Answer any **Five** out of six questions : 10
 - A. What are anti-oxidants.
 - B. Name four natural colours with source.
 - C. Enumerate preservatives used in internal formulations.
 - D. Define tincture.
 - E. What are colloid ions ?
 - F. Define H.L.B. value.

SECTION-B

5. What are suppositories ? Enumerate the ideal characteristics of suppository bases. 10
What are its evaluation techniques ?
6. Write any **one** out of two questions : 10
 - A. What are aerosols ? Give its manufacturing procedure with each part.
 - B. What are cosmetics ? How will you prepare an Ayurvedic lipstick ?
7. Write a short note on any **Four** of the following : 20
 - A. Vanishing cream.
 - B. Ointment bases in brief.
 - C. Polymorphism.
 - D. Formulation and preparation of dentrifices.
 - E. Shaving preparations.
8. Answer any **Five** of six questions : 10
 - A. Applications of aerosols.
 - B. Define Bougies.
 - C. Poulitice.
 - D. Use of talcum powder.
 - E. Difference between a cream and an ointment.
 - F. Enumerate propellants.

GUJARAT AYURVED UNIVERSITY, JAMNAGAR

B. Pharm(Ayu.) Third Year Examination : November - 2016

Dravyaguna – II (Ayurvedic Pharmacology)

Date: 28-11-2016
Monday

Time: 09:30 A.M. to 12:30 P.M.
Marks: 100

- Instructions: 1. Every question is compulsory.
2. Every question bears the marks written on the right side.

SECTION-A

1. Write about the basis of nomenclature and synonyms of Dravya. 10
2. Answer any one out of two questions. 10
 - A. Write about author, period and classification of Raja Nighantu.
 - B. Describe in detail the Aharopayogi Varga and its importance in Pathya.
3. Write a short note on any **Four** of the following : 20
 - A. Vichitrapratyarabdha.
 - B. Bhavaprakasha Nighantu.
 - C. Jala Varga.
 - D. Krutanna Varga.
 - E. Ghruta Varga.
4. Answer any **Five** of the following : 10
 - A. Vidahi.
 - B. Vedana Sthapana.
 - C. Swasahara.
 - D. Mutra Virajaniya.
 - E. Vranashodhana.
 - F. Snehopaga.

SECTION-B

5. Defining Mishraka Varga, describe 'Kshara Panchaka' with its therapeutic importance. 10
6. Answer any one out of two questions. 10
 - A. Write the basonym, synonyms, botanical name, family, part used, pharmacological activity and therapeutic use of Ativisha.
 - B. Write the ingredients and collective action of Panchavalkala with mode of action.
7. Write a short note on any **Four** of the following : 20
 - A. Madhuratraya.
 - B. Ksharastaka.
 - C. Saptopavisha.
 - D. Yamaka.
 - E. Taisharkara.
8. Answer any **Five** of the following : 10
 - A. Mishreya.
 - B. Shinshapa.
 - C. Trayamana.
 - D. Nimbu.
 - E. Kapittha.
 - F. Avartaki.
